

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) One or more computer-readable storage media having stored thereon a set of computer-executable instructions to perform a method for generating data, the method comprising:

generating a plurality of collections of items of data each time the set of computer-executable instructions are executed, wherein each of the collections comprise contents and a sequence, and wherein the contents of each of the collections are identical and the sequence of each of the collections are identical;

accepting, as a first input, at least one of: (a) data sets and (b) data elements from which synthetic data is generated, said synthetic data having a sequence; ~~and~~

determining a position of at least one of the items of data;

determining a seed based upon the position, wherein the seed is used to regenerate the at least one of the items of data; and

receiving ~~a~~ the seed as a second input to a deterministic data generation module, the seed ~~indicating a~~ configured to regenerate the at least one of the items of data at the position in the sequence of the synthetic data, ~~the position representing a starting point in the sequence from which the synthetic data is used as input to a process whose performance is to be evaluated,~~ wherein the seed is within a range allowed by at least one parameter of the data generation module, wherein the at least one parameter is configured to cause the data generation module to generate the synthetic data, wherein the synthetic data is repeatable.

2. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the computer-executable instructions comprise a computing application.

3. (Previously Presented) The one or more computer-readable storage media as recited in claim 2, wherein the computing application comprises a linear congruential generation function.

4. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the seed is set for each discrete data element that may be re-generated.
5. (Previously Presented) The one or more computer-readable storage media in claim 1, wherein the computer-executable instructions operate to generate data in a serial fashion.
6. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the computer-executable instructions operate to generate data in a parallel fashion.
7. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the method is performed in a database environment.
8. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the first input comprises any of a range of letters, a range of numbers, a range of strings, a range of data sets, letters, numbers, strings, and data sets.
9. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the method further comprises:
using a communication means to communicate the synthetic data to cooperating data environments.
10. (Previously Presented) The one or more computer-readable storage media as recited in claim 1, wherein the synthetic data is data for use in benchmarking activities having a predefined data schema definition.
11. (Currently amended) A method for generating data comprising:

providing a deterministic data generation module stored on at least one medium, the deterministic data generation module accepting inputs for processing to generate a plurality of data sets, each data set having synthesized data wherein within the data set each data element has a sequence number, and each data set is organized such that the data is positioned from lowest sequence number to highest sequence number in a sequential fashion, and wherein the synthesized data of each data set is identical; and

providing a seed as input to the deterministic data generation module, the seed acting to position the deterministic data generation module to regenerate data having a predefined sequence number, wherein the seed value is derived from the predefined sequence number, and wherein the sequence number represents a starting point from which the synthetic data is used as input to a process whose performance is to be evaluated, wherein the seed is within a range allowed by at least one parameter of the data generation module, wherein the at least one parameter is configured to cause the data generation module to generate the synthetic data which is repeatable.

12. (Original) The method as recited in claim 11, further comprising communicating the synthesized data to cooperating data environments.

13. (Original) The method as recited in claim 11, further comprising changing the value of the seed.

14. (Original) The method as recited in claim 11, processing the synthesized data by cooperating environments as part of a benchmarking study.

15. (Previously Presented) The method as recited in claim 11, further comprising schematizing the synthesized data according to a predefined data schema definition.

16. (Canceled)

17. (Canceled)

18. (Canceled)
19. (Canceled)
20. (Currently amended) A method to generate repeatable synthesized data comprising:
executing a deterministic data generation function to generate a plurality of data sets corresponding to sequential numbers, the numbers associated with a data element of each data set, wherein each data element and associated number are identical in each data set;
setting a seed to act as input for the deterministic data generation function such that the input drives the deterministic data generation function to regenerate data corresponding to a particular sequential number, wherein the seed is within a range allowed by at least one parameter of the data generation function, wherein the at least one parameter is configured to cause the data generation function to generate the synthetic data which is repeatable, wherein the seed is set for each discrete data element that may be re-generated; and
testing performance of a system by providing said data set as input to said system and measuring behavior of said system using said data set.
21. (Currently amended) A method for generating data, comprising:
determining ~~the~~ a random data output of a random data generator, wherein the output comprises a repeatable sequence of random numbers, wherein each of the random numbers comprises a numerical position;
determining a first seed value corresponding to a first numerical position of the random sequence of values, wherein inputting the first seed value into the random data generator will output the first numerical position;
inputting the first seed value; and
receiving a first random number associated with the first numerical position.
22. (Previously presented) The method of claim 21, further comprising:
determining a second seed value corresponding to a second numerical position of the random sequence of values, wherein inputting the second seed value into the random data generator will output the second numerical position;

DOCKET NO.: MSFT-1797 (303687.01)
Application No.: 10/610,690
Office Action Dated: September 22, 2008

**PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116**

inputting the second seed value; and
receiving a second random number associated with the first numerical position.